



ROOSEVELT IRRIGATION DISTRICT

Briefing on the RID Feasibility Study Work Plan

West Van Buren Area Community Advisory Board

April 15, 2013



OUTLINE OF BRIEFING:

- ✦ **RID's HISTORICAL INVOLVEMENT**
- ✦ **RID's PROGRESS - EARLY RESPONSE ACTION**
- ✦ **MOVING FORWARD WITH THE FEASIBILITY STUDY**
- ✦ **PATH TO THE FINAL REMEDY**



RID's HISTORICAL INVOLVEMENT:

- ✦ LATE 2008, RID IDENTIFIED AS THE SOLE WATER PROVIDER IMPACTED BY WVBA GROUNDWATER CONTAMINATION (ADEQ DRAFT REMEDIAL INVESTIGATION REPORT)
- ✦ FROM THAT TIME FORWARD ... RID HAS TAKEN AN ACTIVE VOLUNTARY ROLE IN THE CLEANUP OF THE WVBA GROUNDWATER AND PROTECTION OF THE PUBLIC AGAINST POTENTIAL EXPOSURE TO VOLATILE ORGANIC COMPOUNDS (VOCs)
- ✦ LATE 2009, RID AND ADEQ ENTERED INTO AN AGREEMENT TO CONDUCT WORK INCLUDING THE EARLY RESPONSE ACTION, FEASIBILITY STUDY, AND IMPLEMENTATION OF THE FINAL REGIONAL GROUNDWATER REMEDY



AGREEMENT TO CONDUCT WORK:

- ✦ **REQUIRES THAT RID PREPARE AND SUBMIT WORK PLANS
DETAILING THE WORK TO BE CONDUCTED**
 - *EARLY RESPONSE ACTION (ERA)*
 - *FEASIBILITY STUDY (FS)*
- ✦ **REQUIRES RID TO CONDUCT ALL WORK IN ACCORDANCE
WITH THE APPROVED WORK PLANS**
- ✦ **REQUIRES RID TO SUBMIT ALL RESULTS AND INFORMATION
OBTAINED BY RID FROM THE WORK UNDERTAKEN**
- ✦ **REQUIRES RID TO REIMBURSE ADEQ FOR THEIR
RESPONSE COSTS IN OVERSEEING THE WORK**
- ✦ **EFFECTIVE OCTOBER 8, 2009**



MODIFIED ERA WORK PLAN:

- ✦ MODIFICATION OF ORIGINAL ERA WP BASED ON SUCCESSFUL WELLHEAD PILOT TREATMENT SYSTEM PERFORMANCE

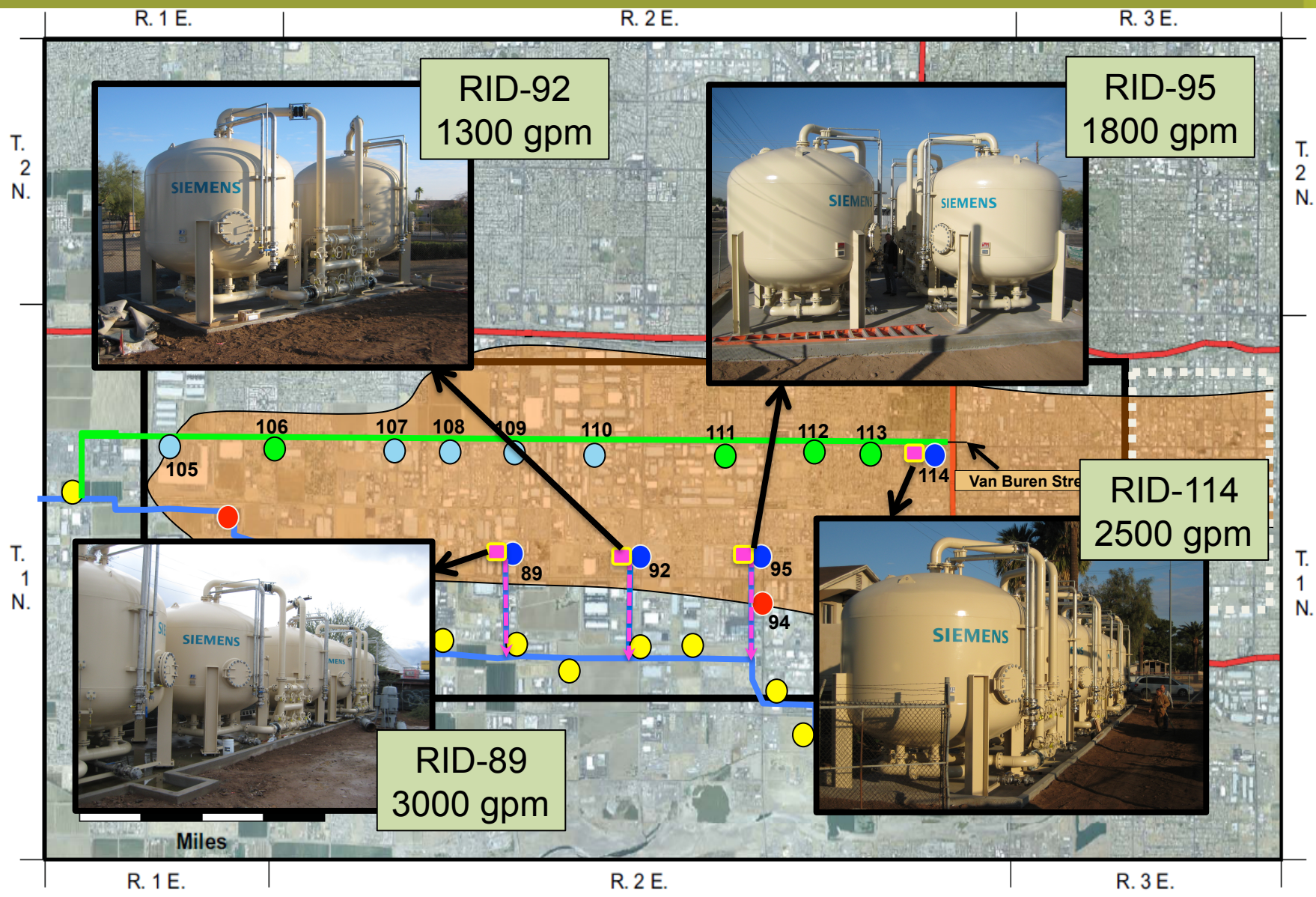
- ✦ MORE THAN 2 BILLION GALLONS OF WATER TREATED IN 2012
- ✦ APPROX. 1,000 POUNDS OF CONTAMINANTS REMOVED IN 2012

- ✦ THESE 4 WELLHEAD TREATMENT SYSTEMS ARE NOW PART OF THE MERA WP AND CAPTURE ~ 1/3RD OF ALL OF THE CONTAMINANTS BEING RELEASED TO THE ENVIRONMENT
- ✦ THE MERA WP INCLUDES 4 ADDITIONAL WELLHEAD TREATMENT SYSTEMS AND BLENDING OF ADDITIONAL WELLS TO ACHIEVE WATER QUALITY STANDARDS



RID BRIEFING FOR THE CAB

4/15/13



MODIFIED ERA WORK PLAN (CONT.)

- ✦ PILOT SYSTEM SUCCESS IS DOCUMENTED IN THE LONG-TERM OPERATIONAL ASSESSMENT REPORT, ISSUED ON APRIL 5, 2013
- ✦ BASED ON THE COST DATA FROM THE PILOT SYSTEMS, THE MODIFIED ERA IS ESTIMATED TO COST ...

- ✦ APPROXIMATELY \$10 MM IN CAPITAL (VS. \$30 - \$35 MM ESTIMATED FOR THE ORIGINAL ERA)
- ✦ APPROXIMATELY \$1.75 MM IN ANNUAL O&M (VS. \$4 - \$5 MM ESTIMATED FOR THE ORIGINAL ERA)

... AND THE MODIFIED ERA WILL ADDRESS AN ADDITIONAL 9,000 GPM THROUGH BLENDING TO ACHIEVE WATER QUALITY STANDARDS



FEASIBILITY STUDY / GROUNDWATER REMEDY:

FS CONDUCTED TO IDENTIFY AND EVALUATE PROPOSED REMEDIES CAPABLE OF ACHIEVING REMEDIAL OBJECTIVES AND SELECT A PREFERRED REMEDY WHICH ...

- ✦ ASSURES PROTECTION OF PUBLIC HEALTH / WELFARE / ENVIRONMENT**
- ✦ PROVIDES FOR CONTROL, MANAGEMENT OR CLEANUP OF HAZARDOUS SUBSTANCES TO MAXIMIZE BENEFICIAL USE OF WATERS OF THE STATE**
- ✦ IS REASONABLE, NECESSARY, COST-EFFECTIVE, TECHNICALLY FEASIBLE**
- ✦ ADDRESSES ANY WELL THAT IS UNFIT FOR CURRENT OR REASONABLY FORESEEABLE END USE AS MUNICIPAL, INDUSTRIAL, AGRICULTURAL, OR DOMESTIC WATER SUPPLY**



FS TECHNICAL APPROACH:

- ✦ **BUILD ON INFORMATION FROM REMEDIAL INVESTIGATION REPORT**
- ✦ **FOCUS ON REGIONAL GROUNDWATER CONTAMINATION BY CHLORINATED VOCs IN EXCESS OF DRINKING WATER STANDARDS**
- ✦ **GENERALLY EXCLUDE SOURCE CONTROL ACTIONS ADDRESSING SOIL CLEANUP AND LOSS OR IMPAIRMENT OF LAND USE**
- ✦ **INTEGRATE AVAILABLE INFORMATION FROM ADJACENT WQARF / CERCLA SITES TO PROVIDE REGIONAL CONTEXT FOR WVBA REMEDY SELECTION**
- ✦ **EVALUATE REQUIREMENTS OF WATER PROVIDERS AND ANY REMEDIAL MEASURES NEEDED TO ADDRESS IMPACTED WELLS**
- ✦ **UPDATE CENTRAL PHOENIX PLUME MODEL TO EVALUATE THE EFFECTS OF GROUNDWATER REMEDIAL STRATEGIES ON CONTAMINANT MOVEMENT**



PATH TO THE FINAL REMEDY:

- ✦ **ADEQ FINALIZES RI REPORT FOR WVBA WQARF SITE – 8/24/12**
- ✦ **DRAFT FS WORK PLAN AND REQUEST FOR ADEQ APPROVAL OF A REMEDIAL ACTION SUBMITTED TO ADEQ - 10/29/12**
- ✦ **ADEQ PROVIDES COMMENTS ON DRAFT FS WORK PLAN – 2/1/13**
- ✦ **FINAL FS WORK PLAN SUBMITTED TO ADEQ – 2/8/13**
- ✦ **PUBLIC COMMENTS SUBMITTED TO ADEQ – 5/6/13**

... RID'S COMMITMENT TO CONDUCT THE FS AND IMPLEMENT THE FINAL GROUNDWATER REMEDY IS DEMONSTRATED BY THE INVESTMENT OF OVER **\$14 MILLION OF RESPONSE ACTION COSTS INCURRED BY RID OVER PAST 4 YEARS**



QUESTIONS?

